

IN THE CLAIMS

Claim 1 (Previously Presented): A ceramic heater comprising a ceramic substrate and a temperature control means, wherein said ceramic substrate has 15×10^{11} or less pores which have a diameter of $0.5 \mu\text{m}$ or more per m^2 by surface measurement with a microscope.

Claim 2 (Previously Presented): The ceramic heater according to claim 1, wherein said temperature control means is a resistance heating element equipped on the surface of said ceramic substrate or inside of said ceramic substrate.

Claim 3 (Previously Presented): The ceramic heater according to claim 1, wherein said temperature control means is a Peltier device equipped on the surface of said ceramic substrate.

Claim 4 (Previously Presented): The ceramic heater according to claim 1, wherein an electrostatic electrode is embedded in said ceramic substrate.

Claim 5 (Previously Presented): The ceramic heater according to claim 1, wherein a chuck top conductor layer is formed on the surface of said ceramic substrate.

Claim 6 (Previously Presented): The ceramic heater according to claim 1, wherein said ceramic substrate is an oxide ceramic.

Claim 7 (Previously Presented): The ceramic heater according to claim 1, wherein said ceramic substrate is a non-oxide ceramic containing oxygen.

Claim 8 (Currently Amended): The ceramic heater according to claim 1, wherein said ceramic substrate is a non-oxide ceramic containing 0.05 to 10% by ~~weigh~~ weight of oxygen.

Claim 9 (Previously Presented): The ceramic heater according to claim 1, wherein said ceramic substrate contains carbon.

Claim 10 (Previously Presented): The ceramic heater according to claim 1, wherein said ceramic substrate comprises aluminum nitride.

Claim 11 (Previously Presented): The ceramic heater according to claim 1, wherein said ceramic substrate has 1×10^8 or more pores which have a diameter of $0.5 \mu\text{m}$ or more per m^2 by surface measurement with a microscope.

Claim 12 (Previously Presented): The ceramic heater according to claim 11, wherein said ceramic substrate has 5×10^{10} or less pores which have a diameter of $0.5 \mu\text{m}$ or more per m^2 by surface measurement with a microscope.

Claim 13 (New): A ceramic heater comprising a ceramic substrate having a heating element inside thereof or on the surface thereof,

wherein said ceramic substrate comprises a nitride ceramic and has 15×10^{11} or less pores which have a diameter of $0.5 \mu\text{m}$ or more per m^2 by surface measurement with a microscope.

Claim 14 (New): The ceramic heater. according to Claim 13,
wherein said ceramic heater is capable of use at a temperature of 200°C or higher.

Claim 15 (New): The ceramic heater according to Claim 13,
wherein said ceramic substrate has a thickness of 25 mm or less.

Claim 16 (New): The ceramic heater according to Claim 13,
wherein said ceramic substrate has a diameter exceeding 200 mm.

Claim 17 (New): The ceramic heater according to Claim 13,
wherein said ceramic substrate contains 0.1 to 20 weight % of sintering aid.

Claim 18 (New): An electrostatic chuck comprising a ceramic substrate and a
temperature control means,
wherein said ceramic substrate has 15×10^{11} or less pores which have a diameter of
0.5 μm or more per m^2 by surface measurement with a microscope.

Claim 19 (New): The electrostatic chuck according to Claim 18, wherein said
ceramic substrate has 1×10^8 or more pores which have a diameter of 0.5 μm or more per m^2
by surface measurement with a microscope.

DISCUSSION OF THE AMENDMENT

Claim 8 has been amended to correct a typographical error.

New Claims 13-19 have been added. Claim 13 is supported by the original claims and the specification at page 9, lines 29-32. Claim 14 is supported at Table 1 at page 34 of the specification, and particularly the headings at 200°C and 450°C for Breakdown voltage. Claim 15 is supported in the specification at page 9, lines 14-16. Claim 16 is supported in the specification at page 9, lines 6-7. Claim 17 is supported in the specification at page 10, lines 8-14. Finally, Claims 18 and 19 are supported by the original claims and the specification at page 11, lines 10-14.

No new matter has been added by the above amendment. Claims 1-19 are now pending in the application.